Create a custom formula and configure color coded threshold

Create a Text-based Formula

You can create a new formula by selecting the fields, or existing profile variables and you can apply mathematical operation on top of it.

Build your custom formula by adding fields and measures from the list of available options. Once saved, the formula is available for use in your reports. You also have the option to set the formula as a shared formula, making it accessible across all reports within your organization.

To create a new formula:

1. Click the profile variable in the visualization and click **Add Formula**.
2. In the New Formula dialog box that appears, enter a name for the formula and enter the description for it.
3. Do one of the following in the text box:
    - Select the data field by using the search option and then select the aggregation type from the drop-down list. Then, click Insert to add the formula to the box.
    - Select the name of an existing profile variable from the drop-down list.
    - Type a numeric value.
    - Type standard functions such as CURRENT_TIMESTAMP() and REPORT_DAYS().
    - Select a mathematical operation: +, –, ×, ÷, or ^.

    Note: Text-based fields can't be added to the formula in the value-based reports since it is not a valid operation for report generation.
4. You can click on the **Formula guidelines** option to view detailed information.
5. Click **Validate** to ensure that the formula is valid.
6. Once it is validated, you can click **Save**.

You can select the Save formula for access across Customer Session Record checkbox to share the custom formula as a shared formula accessible to all reports within your organization. The checkbox will change depending on the record type that you are using. However, you can’t use the formula with other record or profile types.

Creating and Using Shared Formulas

After you create a profile variable, you can make the formula available in the Formulas panel for all users in your organization.

Create a Shared Formula

To create a shared formula from a profile variable:

1. Create a Profile Variable. For more information, see Create a Visualization in the Cisco Webex Contact Center Analyzer document.
2. Right-click the profile variable and select **Save**.
3. Enter a name for the formula and click **OK**.

The formula is saved in the **Formulas** panel.

To create a shared formula from a text-based formula builder:

1. Follow the steps provided in Create a Text-based Formula.
2. Select the **Save formula for access across Customer Session Record** checkbox to share the custom formula as a shared formula accessible to all reports within your organization.

   Note: The checkbox will change depending on the record type that you are using. However, you can’t use the formula with other record or profile types.

Utilize a Shared Formula

To use a shared formula in your report:

1. Identify the Shared Formula to be utilized from the **Formulas** Section in the left pane.
2. Drag it from the left pane and drop it into the **Profile Variables** Section of the report.
3. The shared formula will be highlighted in blue. You can't edit the shared formula from the **Profile Variables** section. But you can view the content by double-clicking it.

Note: Shared formulas in the Formulas tab can be edited by any user in the organization.

Edit a Shared Formula

To edit a shared formula:

1. Click **Add Profile Variables** and then double-click the name of a formula listed in the Formulas panel.
2. Double-click the formula from the **Formula** drop-down list and the Formula Editor opens.

   You can use the **Review Reports using current formula** to view a list of reports in which the formula is currently used.

   Note: You will see the following message: *A formula with this name already exists and may currently be used in multiple reports. You may choose to replace the existing formula-this will update all the associated reports if exists-or save this as a new formula with a different name.*
3. You can edit the existing formula or add additional Fields and Measures.
4. Click **Validate** to ensure that the formula is valid.
5. Click **Save**.

Delete a Shared Formula

To delete a shared formula:

1. Click the **Add button** icon in the Profile Variables box.
2. Locate the formula that you want to delete.
3. Click on the **Delete** icon.

If the formula is not currently in use, it is deleted.

Create and Format a Visualization Title

To create and format a visualization title while creating or editing a visualization:

1. Click to add title in the visualization canvas and enter a new title.
    - To edit the title, select it and enter a new title.
    - In Formatting, select Title from drop-down and enter the title text.

2. To customize the format of the title, select Title from the drop-down list in the Formatting tab to display the formatting options that you can customize, such as border size, style, and color; text alignment and color; margins; padding; and font size, family, style and weight.

Format a Table

To customize the format of a table:

1. Select **Formatting**, and then select Table from the drop-down list.
2. Change any of the following options to customize the table format:

Option	Description
Back Color	Select the background color from the color selector or enter the HTML (hexadecimal) code for a color.
Border Size	Enter a value in pixels to change the border width.
Border Style	Select a value from the drop-down list to specify the style of the border around the table or select None if you do not want a border around the table.
Border Color	Select the border color from the color selector or enter the HTML code for a color.
Set Color Conditions	Set rules for the table that will format the cells with pre-defined colors depending on logic.

3. You can improve the readability and usability of large tabular reports in Analyzer, by using conditional formatting and color coding of data values. This feature helps you quickly understand and respond to important data by visually highlighting key metrics based on your rules.

   You can define these rules using logical operators (for example, Greater Than, Less Than, Between, and so on) to filter which data you would like to highlight.

To set the color conditions, Click **Set Color Conditions**.

4. In the **Set Color Conditions** page, you can create threshold conditions by selecting a field, choosing an operator, entering a custom threshold value, and selecting the cell color from the drop-down list.

   You can assign visual indicators (Red, Orange, Yellow, Green, Blue, with corresponding tags) for each threshold condition.

5. Click **Add condition** to add a new condition.

6. Click **Save**. The configured color code will be visible when you view the report. You have the option to remove the color code by using the **Conditional Formatting** toggle button in the **Settings** tab at the top left of the report.

7. You can edit or delete thresholds whenever your requirements change.

   Note: You will see the rules applied in the preview window.

Notes:

- You can define and set up to 10 threshold levels on a single data metric, allowing for granular control over how data is visually represented.
- Thresholds and their associated conditions are set at the user level, based on individual preferences. User-defined thresholds operate independently and don't interfere with default settings.
- When a report is copied, its threshold criteria can be inherited.